



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,369	02/06/2002	Joachim Hagmeier	DE920000047US1	6141

25259 7590 05/31/2005

IBM CORPORATION
3039 CORNWALLIS RD.
DEPT. T81 / B503, PO BOX 12195
REASEARCH TRIANGLE PARK, NC 27709

EXAMINER

DURAN, ARTHUR D

ART UNIT PAPER NUMBER

3622

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,369

Applicant(s)

HAGMEIER ET AL.

Examiner

Arthur Duran

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 3622

DETAILED ACTION

1. Claims 1-10 have been examined.

Response to Amendment

2. The Amendment filed on 3/28/05 is sufficient to overcome the Wong reference. A new reference has been added to the 35 USC 103 rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. §103(a) as being obvious over Wong US 6,119,933 (Sep. 19, 2000) (herein referred to as "Wong") in view of Kawan (6,889,198).

As per independent claim 1, Wong (FIG. 4, el. "*Object 3:1*") and el. "*Object 3:2*" discloses: a "*Back-end*" computer.

Wong (FIG. 2, el. "*Object 1:7*") discloses: "*DBMS. . . .*"

Wong (col. 2, ll. 3-5; and the ABSTRACT) discloses: "*frequency award point*" and "*A customer frequency, analysis and reward system. . . .*"

Wong (FIG. 12) shows a "spreadsheet. . . ."

Wong (FIG. 1) shows a "communication link connecting [computers]. . . ."

Wong (the ABSTRACT; FIG. 1; FIG. 2A; FIG. 2B; FIG. 3; FIG. 4; FIG. 5; FIG. 6A; FIG. 6B; FIG. 6C; FIG. 7; FIG. 8; FIG. 10; FIG. 11; FIG. 12; FIG. 14; FIG. 15; FIG. 16; FIG. 18; col. 1, ll. 4-67; col. 2, ll. 1-22; col. 2, ll. 42-67; col. 3, ll. 21-67; col. 4, ll. 5-67; col. 5, ll. 7-67; col. 6, ll. 1-67; col. 8, ll. 10-67; col. 1-67; col. 10, ll. 1-67; and col. 11, ll. 1-67) shows: “a back-end computer having a first database for storing loyalty . . . and user data. . . .”

Wong lacks a showing of “a first database for storing loyalty rules . . . a front-end computer having a second database for storing loyalty rules . . . and connecting the back-end computer and the front-end computer for synchronization of the first and the second databases.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the disclosure of Wong cited above would have been interpreted as showing: “a back-end computer having a first database for storing loyalty rules and user data . . . a front-end computer having a second database for storing loyalty rules and for storing user data and a spreadsheet engine for processing user transaction data in accordance with the loyalty rules; and . . . a communication link connecting the back-end computer and the front-end computer for synchronization of the first and the second databases. . . .”, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify and interpret the disclosure of Wong cited above in view of the knowledge of one of ordinary skill in the art as showing: “a back-end computer having a first database for storing loyalty rules and user data . . . a front-end computer having a second database for storing loyalty rules and for storing user data and a spreadsheet engine for processing user transaction data in accordance with the loyalty rules; and . . . a communication link connecting the back-end computer and the front-end computer for synchronization of the first and the second databases. . . .” because modification

Art Unit: 3622

and interpretation of the cited disclosure of Wong would have provided means to “[keep] track of customer frequency award points. . . .” (see Wong (col. 2, ll. 3-10)) based on the motivation to modify Wong so as to “*encourage customers to participate in the system. . . .*” (see Wong (col. 2, ll. 3-10)).

Claim 2 is rejected for at least substantially the same reasons as claim 1. (NOTE: Wong (FIG. 4, el. “*Object 3:1*”) and el. “*Object 3:2*” discloses: a “*Back-end*” computer; therefore in light of this disclosure, the Examiner interprets Wong as inherently showing a “Front-end computer.”

As per dependent claim 3, Wong shows the system of claim 2.

Wong (FIG. 1) discloses a “*P.O.S. DEVICE. . . .*”

Wong (col. 3, ll. 35-55) shows: “*credit card*” utilization.

Wong (col. 9, ll. 47-61) discloses: “*Spreadsheet Net Sales*” and “*Dollars Sold. . . .*”

Wong lacks an explicit showing of “wherein the point-of-sale terminal includes a computer program routine for triggering operation of the spreadsheet engine and a payment application program. . . .”; however, the Examiner interprets the above disclosures of Wong as showing “wherein the point-of-sale terminal includes a computer program routine for triggering operation of the spreadsheet engine and a payment application program. . . .”, and it would have been obvious at the time the invention was made to a person having ordinary skill in the art to interpret the disclosure of Wong as showing “wherein the point-of-sale terminal includes a

Art Unit: 3622

computer program routine for triggering operation of the spreadsheet engine and a payment application program. . . .”

because modification and interpretation of the cited disclosure of Wong would have provided means to “[keep] track of customer frequency award points. . . .” (see Wong (col. 2, ll. 3-10)) based on the motivation to modify Wong so as to “*encourage customers to participate in the system. . . .*” (see Wong (col. 2, ll. 3-10)).

As per dependent claim 4, Wong shows the system of claim 2 or claim 3.

Wong (FIG. 1) discloses a “front-end” “*P.O.S. DEVICE. . . .*”

Wong lacks an explicit showing of “wherein the point-of-sale terminal and the front-end computer are integrated into one device having a common display unit. . . .”; however, the Examiner interprets the above disclosures of Wong as showing “wherein the point-of-sale terminal and the front-end computer are integrated into one device having a common display unit. . . .”, and it would have been obvious at the time the invention was made to a person having ordinary skill in the art to interpret the disclosure of Wong as showing “wherein the point-of-sale terminal and the front-end computer are integrated into one device having a common display unit. . . .”; because modification and interpretation of the cited disclosure of Wong would have provided means to “[keep] track of customer frequency award points. . . .” (see Wong (col. 2, ll. 3-10)) based on the motivation to modify Wong so as to “*encourage customers to participate in the system. . . .*” (see Wong (col. 2, ll. 3-10)).

Claim 5 is rejected at least for substantially the same reasons as claim 1.

Art Unit: 3622

Claim 6 is rejected at least for substantially the same reasons as claim 1.

Claim 7 is rejected at least for substantially the same reasons as the “communication link” element of claim 1. (Also, see Wong (FIG. 1)).

Claim 8 is rejected for at least substantially the same reasons as claims 6, 7 & 3.

Claim 9 is rejected for the same reasons as claim 1.

As per dependent claim 10, Wong shows the method of claim 9.

Wong (col. 5, ll. 35-55) discloses: “award amount (i. e., ‘cost’) . . . processing.”

Wong lacks an explicit showing of “determining a price to be paid by a customer in accordance with the loyalty rule; and . . . displaying the price on the display of a point-of-sale terminal. . . .”; however, the Examiner interprets the above disclosures of Wong as showing of “determining a price to be paid by a customer in accordance with the loyalty rule; and . . . displaying the price on the display of a point-of-sale terminal. . . .”, and it would have been obvious at the time the invention was made to a person having ordinary skill in the art to interpret the disclosure of Wong as showing of “determining a price to be paid by a customer in accordance with the loyalty rule; and . . . displaying the price on the display of a point-of-sale terminal. . . .”; because modification and interpretation of the cited disclosure of Wong would have provided means to “[keep] track of customer frequency award points. . . .” (see Wong

Art Unit: 3622

(col. 2, ll. 3-10)) based on the motivation to modify Wong so as to “*encourage customers to participate in the system. . . .*” (see Wong (col. 2, ll. 3-10)).

Additionally, Wong discloses a rewards system for user loyalty that utilizes a back-end and front-end database for storing user information and user transaction information, and that the back-end and front-end databases can be synchronized, and also the utilization of a marketing computer:

“[Claim] 6. A customer frequency, analysis, and reward system administered by a first entity comprising:

a point of sale (POS) data collection device capable of inputting POS customer transaction data, including a customer profile ID, wherein the POS data collection device is configured to identify a customer with a number previously assigned to the customer by an unrelated second entity;

a local database closely coupled to the point of sale device for storing customer profiles;

a central data warehouse, periodically updated by data in said local database, for storing all customer profiles and transaction details from a number of POS local databases;

a set of analytical information tools, with access to said data warehouse, for performing customer frequency and transaction analysis and generating meaningful information including spending trends and customer frequency; and

a customer loyalty reward system, with access to data in said data

Art Unit: 3622

warehouse, for maintaining information regarding customer frequency in order to provide an awards program as an incentive for a customer participating in said customer analysis system” (col 13, line 4-col 14, line 15).

Wong further discloses that the user utilizes a POS device at a retailer and that the transactions involve the loyalty program (Fig. 1 and below):

“(3) According to one embodiment, a customer interacts with the system initially at a data collection point-of-sale POS) device at a retail outlet or other place where a customer interacts with the seller (or user of the system). This POS device may include a magnetic card reader for reading a magnetic stripe on a credit card or other customer loyalty card, or may include a keyboard for entering customer ID information, or may include a check scanner for reading the number of a customer checking account, or may include a biometric input device such as a fingerprint reading technology, or any other device for identifying and validating the identity of a particular customer or group/family of customers” (col 1, lines 17-30).

Wong discloses a point-of-sale terminal associated with the front-end computer (Fig. 1)

Wong further discloses performing validations at the POS terminal to determine if the user can participate in the loyalty program:

“(4) Once the customer data is read by the POS device, it is compared against a local database which is generally at the retail establishment or quickly accessible to the retail establishment. A match is attempted in the local database from whatever data is collected from the customer. According to one embodiment of the invention, the database will have multiple input points so that a customer does not need to provide a single ID for a loyalty system but

Art Unit: 3622

the customer's identity may be determined from any of the possible inputs including different credit cards, a number of different checking accounts, a driver's license, or any other ID methodology (col 1, lines 30-42).

Wong discloses performing marketing analysis at a central location utilizing data obtained from the POS terminal:

“(6) According to the invention, furthermore, there may be provided a data warehouse. The function of the data warehouse is to collect all generated customer data on a daily basis and to compile customer profiles about each customer in order to enhance marketing to that customer. External information may be compared against the data warehouse such as demographic data or any other data available about particular customers or groups of customers. A number of analytic tools may be performed to provide meaningful analysis desired by the sellers of their customer profiles, such as identifying spending trends, customer preferences, or the like. In one embodiment of the invention, the central database used for customer validation and the data warehouse are the same database (col 1, line 55-col 2, line 4);

(6) Other features also may be included in specific embodiments of the invention, including: (1) Remote location collection of customer visit and POS transactional data; (2) End of day transmission of the data; (3) Translation and storage of data in membership & POS database (data warehouse); (4) Hard copy and on-line individual reports of membership information; (5) Hard copy and on-line reports on the frequency of customer visits; (6) Hard copy and on-line reports on sales information linked to customer visits; (7) Weekly and monthly transmission of summarized data back to customer sites for analysis;

(7) Remote Data Collection POS Input

Art Unit: 3622

(8) At the remote location, the system can be an existing DOS or Windows based POS device with a magnetic-strip reader or other input device to collect customer frequency information or, for locations without the adequate POS equipment, an external card reader with built in modem and printer may be installed. In cases where a credit card is used to identify customers, a device will be used to read an existing credit card, and only pick up the last several digits of the card number. The purpose for this is convenience to the customer, comfort level of security, used as the member identification number, and is a cost saving to users of the invention of not having to produce membership cards. The device prompts the user of the system for any requested information, stores the data and transmits to the host system on a daily basis. A small printer is attached to print a transaction receipt with membership information, date and time of visit, and points added. The communication link between the remote locations and host can be dial up phone service, sprintnet or telenet type service, T1.5 access, or dedicated line service all contingent upon client needs (col 3, lines 20-55);

(11) The user of the remote data capture device will take input from an existing credit card, smart card, private label card, or biometric device and record the member identification. If the member does not have an input card, the screen can prompt the server to manually enter a member number. The screen can allow entry of the guest receipt number and total amount of receipt. Generally, the collected information will be stored on the POS device until at the end of the day, when the device batches and transmits the EOD file to the host network. The POS transactional data is transmitted to the host network and the combined data is used to correlate and provide relevant management reports" (col 3, line 65-col 4, line 10).

Wong further discloses the utilization of databases and data organizing means:

Art Unit: 3622

“(16) Reports--Accessing the databases and presenting the information in an understandable and useful format is a primary objective. Predefined reports and online queries against the database are important features of the embodiment” (col 4, lines 24-30).

Wong discloses the utilization of points, calculations of points providing, and the utilization of smart cards:

“(7) According to a further embodiment of the invention, the system keeps track of customer frequency award points in order to encourage customers to participate in the system. A mechanism is provided for customers to directly interact with this customer loyalty system in order to determine their eligibility for awards, or other information, based on their patronage of particular retailers that participate in the customer loyalty system. According to one embodiment, this interface is provided via the World Wide Web over the Internet wherein customers are allowed to interact directly with aspects of the data warehouse, to view their customer information, and to make corrections to such identifying information as telephone numbers and addresses.

(8) According to a further embodiment of the invention, a customer may be given a smartcard, which records customer award points as well as other customer data such as customer preferences or frequency of visits. The invention will be understood better with reference to the following detailed descriptions of the drawings” (col 2, lines 3-23).

Kawan discloses updating or synchronizing the back end computer with information and transaction information on users from the front end computer:

“(14) In an embodiment of the present invention, as another alternative, the stand alone terminal 2 has the capability to print out summary information for the local merchant on printer

Art Unit: 3622

14. The merchant can print out daily/weekly/monthly reports on the loyalty program usage and other program information. These reports are useful in auditing total points given to customers, total points redeemed, and other similar information. As an additional alternative, the loyalty program 28 reports the update of the loyalty register 40 back to the stand alone terminal 2, and the stand alone terminal uploads the update to a back office loyalty server” (col 8, lines 5-15).

Kawan discloses that loyalty rules on front end are updated from and synchronized with the back end and that the front end rules are utilized for processing transactions at the POS terminal:

“(24) In an embodiment of the present invention, a merchant may wish, for example, to run specials such as on a particular day of the week to award the consumer double points if the consumer uses the card 4 at a certain time of day, such as between 2:00 pm and 4:00 pm. In order to accomplish that, since the terminal records the merchant identifier 42, for example, a couple of bytes of the merchant identifier is used to specify specific kinds of updates. For example, either a central system or the merchant loads into the terminal, remotely or locally, the variation of the two bytes into the merchant's identifier 42. Thus, when the terminal operates and commands "do loyalty update," or when the transaction takes place and the transaction is stored in the transaction record 26 of the card 4, when the loyalty application on the card looks at the merchant identifier 42 and compares the merchant identifier, it uses that information to adjust how the points are added to the card, either one to one, or with some multiplier, or with some other variation to award loyalty points” (col 10, lines 30-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Kawan's front end rules updated by the back end to Wong's processing transactions at the front end/POS terminal. One would have been motivated to do this in order to provide Wong with the capability of changing how transactions are handled as Wong performs marketing analysis and better understands how to interact with the user.

Hence, the combination of Wong and Kawan renders obvious at least one front-end computer that also contains a database for storing the loyalty program rules and user data as well as a spreadsheet engine for processing user transaction data in accordance with the loyalty program rules stored in the front-end computer. . .includes a communications link for maintaining synchronization between the loyalty program rules stored in the back-end computer and the front-end computer.

Response to Arguments

3. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Please particularly note the additional citations, explanations, and reference beginning with the section stating: "Additionally, Wong discloses a rewards system for user loyalty that utilizes a back-end . . .".

Examiner notes that while specific references were made to the prior art, it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being referred to.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Von Kohorn (5,916,024) discloses an awards program and the updating of information and instructions at a remote station by a central station:

“FIG. 17 is a simplified diagrammatic view of the invention showing both the central station and a receiving station in which an audio recorder having four separate channels is employed, the channels communicating audio signals for task and instructions, for synchronization, for response criteria, and for scoring criteria;

(649) A further feature of the invention, shown in FIG. 45, is attained by including within each of the remote receiving stations 1406, a modem 1518 to which is applied enhanced score information from the score enhancement circuitry 1422. The modem 1518 enables the score enhancement information to be communicated via a communication link 1520 to a central data storage facility 1522. The storage facility 1522 enables advertisers to review the progress of the respondents of the various remote receiving stations 1406, and to use such information possibly for altering or updating instructions sent to the remote receiving stations 1406 from the central station 1402. In the event that cable transmission is used within the transmission link 1404, the same cable may be utilized as part of the communication link 1520 to simplify interconnection between a receiving station 1406 and the storage facility 1522. If desired, the storage facility 1522 may be located in proximity with the central station 1402”.

Art Unit: 3622

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571) 272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arthur Duran
Patent Examiner
5/25/05